

Remarks

1. Applicant offers no changes to the claims as presently pending in this application since, in the applicant's view, the claims define an invention which is both novel and which is not rendered obvious over the combination of Applicant's Admitted Prior Art (AAPA), Borella (US6697354) and Hung (US6760429).
2. Applicant maintains as entirely pertinent the entirety of its submission presented in the response of November 2, 2005 which is not repeated here for the sake of brevity but which is incorporated herein by way of reference.
3. Applicant has carefully reconsidered the Examiner's grounds for rejecting the currently pending claims particularly in light of the detailed "Response to Arguments" section presented in the Final Office Action, for which the applicant is grateful, and realizes that the Examiner's grounds are regrettably based on a misconstruction of the content of prior art reference Borella.
4. The present invention as defined by currently pending claim 1 concerns a method of establishing a communications path between a first entity and a second entity in a communications network comprising at least two address domains, said address domains being connected by two or more address translators. The method comprises the steps of: i) sending a call set-up message from the first entity to a first one of the network address translators via only a first one of the address domains, said call set-up message containing an address of the first entity within the first address domain; ii) receiving the call set-up message at the first network address translator and retaining the address of the first entity within the first address domain in the call set-up message as well as adding information about the identity of the first address domain to the call set-up message; iii) forwarding the call set-up message to the second entity via a second one of the address domains and a second one of

the address translators such that the information in the call set-up message can be used to establish a communications path from the second entity to the first entity which excludes one or more of said address domains (emphasis added).

It can be seen therefore that it is at the first network address translator which, in effect, forms a bridge between the first and second address domains that the steps of retaining the address of the first entity within the first address domain in the call set-up message as well as adding information about the identity of the first address domain to the call set-up message are performed. The call set-up message retaining said first domain address of the first entity as well as the added information about the identity of the first address domain is then sent to another entity via the second address domain. The novel and enhanced call set-up message of the present invention enables a determination to be made as to whether the another entity receiving the call set-up message is in the same first address domain as the sending entity and, if so, for a media path from the another entity to be formed directly to the sending entity through said first address domain thereby excluding the second address domain used to convey the call set-up message. The advantages of this novel arrangement are fully described in the present application.

5. The Examiner has made particular reference to column 17, lines 23 to 41 of Borella as teaching "*a network address translation method to retain the address of the first entity within the first address domain in the call set-up message as well as adding information about the identity of the first address domain to the call set-up message and transmit the message to the second network*". Applicant submits that Borella does not teach this and in fact teaches the opposite.

Borella addresses issues relating to network address translation and mobile device roaming. Where a mobile device has a local network (subnet) address not globally available to external networks and said device roams into the domain of an external network, problems occur in delivering data packets to the roaming mobile device

using its not globally available local network address. Such problems occur since it is necessary to somehow translate the roaming mobile device's not globally available local network address to a globally recognized external address. Borella teaches a solution to this problem comprising assigning to data packets addressed to the roaming mobile device a combination address comprising a unique port and a common external network address for the mobile's device local network (column 3, line 60 to column 4, line 20).

Considering now more carefully column 17, lines 23 to 41 of Borella, it can be seen that the process illustrated by figure 13 of Borella occurs entirely at a network device, e.g. PC 14. PC 14 is one device which together with router 26 and other devices (see figure 1) forms a local SOHO LAN 12 having a common external network address, namely 198.10.20.30. Thus, router 26 effectively comprises the first network address translator forming a bridge between the first address domain (local network 12 including PC 14 and router 26) having an internal address domain of the form 10.0.0.0 and external networks 30, 32 having external globally available address domains of the form 192.0.0.0, etc.

At a network interface card device driver 44 of PC 14 a data packet received from a network layer 46 of said PC 14 is assessed to determine if its destination network address (e.g. 192.200.20.3) is for an external network. If such packet has an external network destination address, the network interface card device driver 44 of PC 14 adds an outer IP header 48 to the data packet. The source address of the outer IP header 48 is set by the device driver 44 to the internal network address (e.g. 10.0.0.1) of PC 14 and the destination address set to the internal network address (e.g. 10.0.0.7) of router 26. Then a local source port from the header is translated to a globally unique port. The data packet with the added outer IP header 48 is then transmitted from PC 14 to router 26. The function of the added outer IP header 48 comprising as its source address the internal (local) network address of PC 14 and as its destination address the internal network address of router 26 is to enable the

data packet to be routed to the router 26. The data packet transmitted from PC 14 to router 26 is therefore transmitted over the same address domain.

At router 26, the outer IP header 48 is stripped away from the data packet. The router then translates the address of the data packet to a combination address comprising a combination of the common external address (198.10.30.30) of the local network and the globally unique port assigned to PC 14 and the data packet is then transmitted to an external network such as network 30.

It can be seen from the foregoing that, rather than *retaining the address of the first entity within the first address domain in the call set-up message*, router 26 actually strips off such address from the data packet. Further, router 26 does not *add any information about the identity of the first address domain to the call set-up message and transmit the message containing this information to the second network*. The second, i.e. external, network 30 receives with the data packet a source address comprising only the common external address for the local network 12 of PC 14 and a globally unique port for PC 14. The common external address for the local network (SOHO LAN 12) is a second address domain format address and thus cannot be construed as being *information about the identity of the first address domain*. Thus, Borella not only does not teach the abovementioned features of claim 1 as contended by the Examiner but teaches an arrangement that goes completely against what is proposed by the present invention. Consequently, Borella not only does not teach the contended claims limitations but a skilled addressee would not look to Borella as a basis for modifying AAPA to arrive at the present invention since Borella teaches against the present invention.

Applicant respectfully submits that claim 1 is, therefore, not rendered obvious by the combination of AAPA, Borella and Hung.

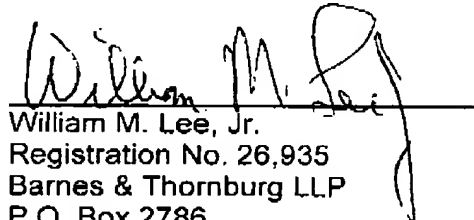
6. The foregoing analysis is equally applicable to independent claims 9 and 12 which also are submitted to be in an allowable form.

7. The foregoing submission raises no new issues.

8. In conclusion, Applicant firmly believes that the invention as claimed is novel and non-obvious over the prior art citations raised by the Examiner and requests favorable reconsideration of this application.

March 14, 2006

Respectfully submitted,



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